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# **Chapter Seven**

# ENVIRONMENTAL PROCEDURES / DESIGN SUMMARY

#### 7-1.0 ENVIRONMENTAL PROCEDURES

#### 7-1.01 INDOT Document

The INDOT *Procedural Manual for Preparing Environmental Studies* presents the Department's procedures for the preparation of the environmental documents described below.

The designer should refer to the appropriate document as needed to determine the role of environmental procedures in project development. Copies of such document may be obtained from the Environment, Planning and Engineering Division.

An editable version of Figure 7-1A, Scope / Environmental Compliance Certification / Permit Application, may also be found on the Department's website at www.in.gov/dot/div/contracts/design/dmforms/.

If more right of way is required for a project than is described in the environmental document, the designer should submit a written request to the Environment, Planning and Engineering Division's Environmental Services Section to determine if an Additional Information subsection is required.

Such documents prepared for a Department project will apply as shown below.

#### 7-1.01(01) Categorical Exclusion (CE)

The types of projects for which the environmental document is typically considered to be a CE are as follows:

- 1. access control;
- 2. added travel lanes with little or no right-of-way take;

# SCOPE / ENVIRONMENTAL COMPLIANCE CERTIFICATION / PERMIT APPLICATION CERTIFICATION (Figure 7-1A)

| Route  |                                      |  |
|--|--------------------------------------|--|
| Des No   |                                      |  |
| Bridge File:   |                                      |  |
| Project Type:  |                                      |  |
| Project Location:  |                                      |  |
| [Click On One:]<br>Scope Reviewed at Preliminary Plans Submittal<br>Environmental Document Reviewed at Hearing Plans Subm<br>Environmental Document Reviewed Upon Design Approva<br>All Permit Requirements Have Been Determined and App<br>Final Check Prints Submittal   | ા                                    | ∕e Been Made at  |
| <ol> <li>I have reviewed the Scope of Work/Environmental consistent with the Scope of Work and statements Document.</li> <li>All mitigation measures stated in the Environmental incorporated into the plans and specifications.</li> <li>The Design Summary is accurate and consistent with and Plans.</li> <li>The following Permits are required and applications have</li> </ol> | made in the Document an the Environm | e Environmental<br>d/or Permits are<br>nental Document |
| <u>Permit</u>  | Required<br>Yes No                   |  |
| FAA Navigable Airspace Permit  | <br><br>t<br>                        |  |
| Printed Name  Consultant   | INDOT Revi<br>Initials<br>Date:      |  |
| Signature  | Date:                                |  |

- 3. bridge rehabilitation;
- 4. bridge replacement;
- 5. drainage correction;
- 6. erosion and landslide control;
- 7. guardrail and lighting;
- 8. intersection improvement;
- 9. railroad crossing improvement;
- 10. rest area modernization and construction;
- 11. Resurfacing, Restoration, and Rehabilitation (3R);
- 12. safety improvements;
- 13. sight distance correction;
- 14. signalization and signing;
- 15. small structure replacement; and
- 16. weigh station modernization and construction.

#### 7-1.01(02) Environmental Assessment / Finding Of No Significant Impact (EA/FONSI)

The types of projects for which the environmental document is typically considered to be an EA/FONSI are as follows:

- 1. added travel lanes involving acquisition of large amounts of right-of-way and a considerable number of relocations; and
- 2. construction of a new roadway.

#### 7-1.01(03) Environmental Impact Statement / Record of Decision (EIS / ROD)

The types of projects for which the environmental document is typically considered to be an EIS are as follows:

- 1. construction of a new controlled access freeway;
- 2. onstruction of 4 or more lanes on a new location; and
- 3. project with a significant adverse impact on the human environment.

#### 7-1.01(04) Environmental Commitments

All environmental, context-sensitivity, and land-acquisition commitments to be incorporated into each project will be summarized in Figure 7-1B, Commitments Summary, by the originators of the commitments. The Summary will then be transmitted to the designer, who will determine if each commitment can be incorporated into the project work.

If a commitment can be incorporated as proposed, the designer should indicate so in Figure 7-1B. If the designer believes that a commitment cannot be incorporated as proposed, he or she may request and receive written approval from the commitment's originator to delete or modify the commitment. Such request, including the rationale for deletion or modification, should be sent to the Production Management Division's Environmental Services Office's Environmental Policy Team leader. A copy of the request should also be sent to the appropriate Production Management Division project coordinator. The Environmental Policy Team will notify the designer whether it is acceptable to pursue deletion or modification of a commitment with the appropriate regulatory agency. The designer may not delete or modify a commitment until written approval is received from the appropriate regulatory agency or agencies. Once such approval is received, the designer should indicate in Figure 7-1B that the commitment has been deleted or modified, with the rationale for such.

An example of a commitment included in the environmental document that might be considered for deletion is the fish spawning restriction (no in-channel work between April 1 and June 30), especially if it is an intermittent stream (dry most of the time).

If a project has not received design approval and the designer believes that one or more of the commitments listed in the environmental document should be omitted or modified, the designer should follow the procedure described above. The designer should then develop the Fish and Wildlife Review and Mitigation Section of the Design Summary accordingly, based upon the written response from the Environmental Policy Team and the appropriate regulatory agency or agencies. The designer should attach to the Fish and Wildlife Review, the letter(s) from the appropriate regulatory agency or agencies approving deletion or modification of a commitment.

Once Figure 7-1B is finalized, it should be incorporated into the final contract documents.

If INDOT committed to the fish spawning restriction in the Fish and Wildlife Review and such restriction is not contained in any of the permits to be included in the contract documents, the designer must prepare a unique special provision and include it in the special provisions attachments.

COMMITMENTS SUMMARY Figure 7-1B

To Appear on this Page

- 1. <u>Site Construction Approval of Wetland Mitigation Areas for Local Transportation Project</u>. The INDOT wetland scientist, wetland biologist, or landscape architect should not be referenced in the special provisions as an approving agent for wetlands under construction. These duties are the responsibility of the design firm or the agent of the local public agency who will be monitoring these sites. The local public agency is responsible for the five year monitoring of these mitigation areas. It is their responsibility to ensure the viability of the site for intended mitigation.
- 2. <u>Preliminary Site Investigation Review</u>. The designer should review the preliminary site investigation and site assessment and take appropriate action (place notes on plans, include special provisions, etc.). For clarification or assistance with understanding these reports, the designer should contact the Environment, Planning and Engineering Division's Environmental Services Section manager. Information shown in these documents regarding gas storage tanks and hazardous waste should be incorporated into the plans or specifications.
- 3. <u>Woody Vegetation Plans Procedures</u>. The procedure for processing Woody Vegetation plans is as follows:
  - a. The Woody Vegetation plans should be transmitted to the Design Division's project coordinator at the Preliminary Field Check and Final Plan stages. The submittals will be logged in by the project coordinator and sent to the Design Division's landscape architect for review.
  - b. Once the plan review has been completed, the landscape architect will send a memorandum to the designer with a copy to the project coordinator. For a consultant-designed project, the landscape architect will also send a copy of the memorandum to the Design Division's project manager.

The preliminary woody revegetation review should be coordinated with the Design Division's landscape architect. This is to occur in advance of the Fish and Wildlife Review submittal. The landscape architect is to respond directly to the designer with a written summary of the review with a copy to the Design Division's project coordinator.

The designer should work directly with the landscape architect regarding final woody revegetation review. The Design Division's project coordinator is to receive a copy of the written summary of the review.

4. <u>Asbestos Certification</u>. The designer is required to file a statement to certify that no asbestos-containing material was specified as a building material for the project. The certifications that are received are placed in the project file. In order to be of use to INDOT, it must be able to retrieve the appropriate statement when the structure is worked on in the future. Therefore, the designer should send the original certification to the appropriate district bridge inspector, with a copy to the Environment, Planning and Engineering Division's Environmental Services manager, and place a copy in the design calculation book for the project.

#### 7-1.02 Wildlife Habitat Replacement

To some extent, the project will likely disturb existing wildlife habitat. Wildlife habitats may include woodlands, overgrown fields and pastures and wetlands. The Department's policy is to replace any disturbed wetland. This will often require the purchase of additional right-of-way. To determine the project's effect on plants and animals, the designer should review the Engineer's Report or, where provided, the EIS or EA. These reports may also provide recommendations on the type and quantities of habitat to be replaced.

The designer is responsible for incorporating the mitigation of the wildlife habitat into the road or bridge plans. This may include revegetation with special grasses and woody species, wetlands grading and seed mixtures, etc. However, wetlands revegetation with aquatic and woody species is usually administered under a separate contract once the road or bridge plans have been completed. The Environment, Planning and Engineering Division will assist in coordinating habitat types and quantities. The Landscaping Unit will assist in the development of plans and specifications.

#### 7-1.03 Wetland Design Guidelines

Wetlands are often disturbed by a highway project. The Department's policy is to replace any disturbed wetland areas when required. Therefore, where the creation of new wetlands for the replacement, enhancement or restoration of existing wetlands is necessary, the following guidelines should be considered.

- 1. Wetland Sites. Previously altered wetland sites are preferred over upland sites.
- 2. <u>Early Coordination</u>. Initiate and continue throughout the design process if the road or bridge and associated wetland designs are accomplished by separate designers.
- 3. <u>Design Features</u>. Incorporate features which will allow control over the wetland water elevation when necessary. This is critical to successful installation and establishment of various aquatic species.
- 4. <u>Wetland Contract</u>. When setting up a separate contract involving wetlands, it will be the designer's responsibility to include one or more of the following conditions:
  - a. The wetland shall be one of the first items constructed and operational, excluding aquatic plantings or seedlings, in the contract. This is imperative because the wetland hydraulics must function as intended and any corrections must be made during the contract time. It will be necessary to include such items as sodding, temporary seeding, or erosion control that pertains to the wetland in the complementary road or bridge contract.
  - b. Install aquatic plantings and seeding in a separate follow-up contract. A minimum of one growing season establishment period will be required. More than one establishment period may be necessary in a special situation. Consult the Design Division's landscape architect for guidance in determining the establishment periods.
  - c. Install aquatic plantings and seeding in the road or bridge contract when it is not practical to do so in a separate contract. A one-growing-season establishment period will be required. It is imperative that the wetland is one of the first items to be constructed and operational because availability, delivery, and installation of aquatic plantings and seeding is on a limited basis.
- 5. <u>Vegetation Plans</u>. When developing wetland vegetation plans, specify species which are commonly supplied by nurseries specializing in aquatic species. Avoid species that are rare or uncommon which, typically, are limited in supply.

- 6. <u>Native Species</u>. It is important to realize that species which are present at or near the wetland site will self colonize the new wetland given the necessary hydraulic requirements. Sometimes these species are difficult or impossible to find and should be omitted from recommended planting lists.
- 7. <u>Planting Recommendations</u>. When specifying aquatic plants, tubers, roots, etc., the following application rates are recommended.

| Proposed Wetland Site Treatment | Application Rate Per Hectare |
|---------------------------------|------------------------------|
| Enhancement                     | 2,500                        |
| Restoration                     | 2,500                        |
| Creation                        | 2,500 - 7,500                |

It is also recommended that plants be installed in groupings of approximately 10 to 20 plants.

For additional information on wetland design, refer to the *INDOT Division of Design, Wetland Mitigation Design Guide*.

| 7-1(10) | ENVIRONMENTAL PROCEDURES / DESIGN SUMMARY | July 2006 |
|---------|---|-----------|
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#### 7-2.0 DESIGN SUMMARY

#### 7-2.01 Introduction

The Design Summary is a written document describing a project, its existing conditions, the planned improvements, and the different considerations utilized in developing the design for the project. It is a Design Division document prepared primarily for the use of the Environment, Planning and Engineering Division's Public Hearings Section.

A Design Summary must be prepared for each project (including one that does not involve the acquisition of new right of way), except for a bridge rehabilitation or bridge widening project without right-of-way requirements. This type of project requires a Bridge Inspection Report which is submitted to obtain design approval. See Chapter Seventy-two for a discussion on the Bridge Inspection Report.

An Abbreviated Design Summary will be required for an Interstate rehabilitation project as described in Section 7-2.03. A Brief Design Summary is required for each stand-alone project. Blank design summary forms are shown as the figures as follows:

| <u>Figure</u> | <u>Title</u>                                       |
|---------------|--|
| <b>5.0</b> 4  |  |
| 7-2A          | Design Summary Form (Bridge/Culvert Replacement)   |
| 7-2B          | Design Summary Form (Road Project)                 |
| 7-2C          | Design Summary Form (Roadway Lighting Replacement) |
| 7-2D          | Design Summary Form (Roadway Signs Replacement)    |
| 7-2E          | Design Summary Form (Signalization Project).       |
|               |  |

Editable versions of these figures may also be found on the Department's website at www.in.gov/dot/div/contracts/design/dmforms/.

Where a major roadway project includes bridge replacement or new bridge construction within the project limits, the structure should be discussed within the Design Summary for the major project.

The Final Design Summary should be processed for design approval as soon as all public involvement requirements have been satisfied. With the exception of an Interstate rehabilitation project, it is not necessary to wait for the final pavement design before obtaining design approval.

Section 7-2.0 assumes the project to be consultant designed, but it need not be limited to that use. Each Design Summary should follow the format suggested in this Section. Direct all questions on the preparation of the Design Summary to the Design Division's project manager assigned to the project for which the report is being prepared.

#### 7-2.02 Design Summary Sections

It is not necessary to attach the documents to the Design Summary as follows.

- 1. title sheet;
- 2. Index;
- 3. cost estimate (except for an Interstate rehabilitation project);
- 4. design concept letter;
- 5. hydraulic review;
- 6. scour review;
- 7. permits;
- 8. photographs; or
- 9. pavement design (except for an Interstate rehabilitation project).

The following documents, however, are required in the Design Summary.

1. <u>Title Block</u>. This information is used to identify the project and report submission. The following format should be used.

| Design Summary Type                      |      |
|--|------|
| Route No.: SR or US or I                 |      |
| Des No.:                                 |      |
| Project No.:                             |      |
| Structure No.:                           |      |
| County:                                  |      |
| City or Town:                            |      |
| Federal Oversight: (Not Required) (Requi | red) |

a. "Design Summary Type." The Design Summary should be prepared in three phases: Preliminary Draft, Draft, and Final. The applicable submission type should be indicated in the Title Block.

- b. "Route No." The route number and/or road or street name should be included.
- c. "Des. No." This can be found in the INDOT project scheduling system, or, for a consultant-designed project, it can be found on the Notice to Proceed letter.
- d. "Project No." The Construction project number can be found in the INDOT project scheduling system, or, for a consultant-designed project, it can be found on the Notice to Proceed letter. Subsequent correspondence generated by the Design Division's project coordinator will reflect any changes in the project number.
- e. "Structure No." If applicable, this can be found in the INDOT project scheduling system, or, for a consultant-designed project, it can be found on the Notice to Proceed letter. Subsequent correspondence generated by the Design Division's project coordinator will reflect any changes in the structure number.
- f. "County." The county in which the project is located should be shown.
- g. "City or Town." The city or town for an urban-area project should be shown.
- h. "Federal Oversight." This information can be found in the Engineer's Report or in the INDOT project scheduling system.
- 2. <u>Location and Project Description</u>. Provide a description of the location of the project, in kilometers from a given reference point, and the county name. See Section 40-8.0 for Department policies for adherence to design criteria.

A brief written description of the planned improvement must be included in this section. Any important design elements or features that were not addressed in the environmental document should be included in the Design Summary.

The first sentence of the Design Summary should include the work category. Examples of work category include: Added Travel Lanes, Bridge Replacement, Road Reconstruction, etc.

a. Roadway. The data that should be included are as follows:

- (1) total project length;
- (2) changes in horizontal and vertical alignment;
- (3) length of approach work from each end of a bridge (for bridge project only); and
- (4) indication of whether the intersection sight distance meets the applicable criteria for the project.
- b. Structure (if applicable). The data that should be included are as follows:
  - (1) description of the structure (e.g., structure type, span lengths, skew); and
  - (2) clear roadway width of structure.
- c. Miscellaneous Project-Related Information. If applicable, the project features that should be briefly addressed are as follows:
  - (1) significant county road relocations;
  - (2) less-than-standard intersection sight distance;
  - (3) underground storage tank remediation;
  - (4) channel relocation;
  - (5) clearing of wooded/forest areas;
  - (6) significant historical/archaeological considerations;
  - (7) sidewalks;
  - (8) Level One design exceptions;
  - (9) Level Two design criteria not met;
  - (10) permanent road closures; and
  - (11) non-Interstate permanent median crossover closures.
- d. Discussion of Alternatives. It is not necessary to repeat the discussion of alternatives contained in the Engineer's Report and environmental document. The Public Hearings Section can usually refer to the environmental documents which it has on file.

#### 3. Need for Improvement.

- a. The need for the improvement should include a brief description of the existing facility and the current condition of the facility. For a bridge, discuss the existing structure condition, substandard geometrics or the inadequacy of the existing waterway opening.
- b. The accident history of the project location should be briefly discussed, if it is a contributing factor to the need for the project.
- c. For a major project, the additional points that may be applicable are as follows:
  - (1) transportation demand, including the urban transportation plan;
  - (2) Federal, State or local government authority (legislation) directing the action;
  - (3) social demands or economic development, new employment, schools, land use plan, recreation, etc. What projected economic development/land use changes indicate the need to improve or add to the highway capacity? References to the environmental document could be helpful in these areas;
  - (4) Intermodal Relationships information on how the proposed facility may interface with airports, rail facilities, mass transit services, etc. References to the environmental document could be helpful in these areas;
  - (5) system linkage questions, such as: Is the proposed project the "connecting link"? Does it connect with other highway facilities? How does it fit into the system?
  - (6) Capacity can add to the demand, social services demand, or economic development. What capacity will be needed? The existing and proposed Level of Service should be discussed. Is the capacity of the existing facility adequate for the present traffic?
- 4. <u>Prior Studies and Considerations</u>. List the engineering assessment approval date (if applicable), environmental approval dates, field check dates, and all permit information. If a design exception was obtained, list its approval date also.

Include the following statement: *The proposed design is consistent with the approved environmental documentation*. If this is not true, briefly explain any minor deviations from the environmental report. Any significant deviations must be addressed in an Additional Information (AI) to the environmental document. If more right of way is required than is described in the environmental document, the designer should submit a written request to the Environment, Planning and Engineering Division's Environmental Assessment Section to determine if Additional Information is required.

5. <u>Design Data</u>. Design data should at least include the project design criteria, functional classification, terrain, and design speed. Also include posted speed, access control, proposed roadway and shoulder widths, minimum and maximum right-of-way, obstruction-free zone or clear zone, side slopes, and, if appropriate, structure clear roadway width. A presentation similar to the following example should be shown.

#### Design Data

Project Design Criteria: 3R (Non-Freeway)

Functional Classification: Rural Minor Arterial

Terrain: Rolling

Design Speed: 90 km/h

Posted Speed: 55 mph (88 km/h)

Access Control: None

Number of Lanes and Widths: 2 @ 3.6 m

Shoulders: 2.7 m (2.4 m HMA stabilized)

3.7 m (2.7 m HMA stabilized) in

**Guardrail Sections** 

Maximum Right-of-Way Width: 34 m (20 m north and 14 m south)

Minimum Right-of-Way Width: Existing 18 m (9 m north and 9 m south)

|    | Structure Clear Roadway Width:  | 12 600 mm   |   |
|----|---|---|---|
|    | Obstruction-Free Zone/or Clear Zone:  | 6.0 m   |   |
|    | Side Slopes:  | 4:1   |   |
| 6. | Traffic Data. Data should include existing vehicles. The data is available in the Enfollowing should be shown.  |   | · ·   |
|    | Traffic Data:   |   |   |
|    | AADT (20) VPD AADT (20) VPD DHV (20) VPH Comm. Veh DHV % AADT   |   |   |
| 7. | Description of Right of Way. Discussion acquired in hectares for both permanent a business or residential relocations. Include of way such as Temporary Right of Way.     | and temporary right of way<br>de a reference on the use | y. Include a list of any                          |
| 8. | Estimated Cost. The project costs should year in which the report is expected construction should be shown. The cost fway, and construction. Each of these co as follows: | to be approved and these shall include preliminar       | e anticipated year or<br>ry engineering, right of |
|    | Project Cost Summary:   |   |   |
|    | Preliminary Engineering:<br>Right of Way:<br>Construction:  | Year:<br>\$   | Year*:<br>\$                                      |
|    | Total Cost:   | \$  | \$  |
|    |   | * % annual inflation                                    | is used for projection                            |

The preliminary engineering cost for a consultant-designed project will usually be the consultant's design fee. The in-house design cost is 10% of the construction cost, which includes environmental work, surveying, geotechnical, etc., in the preliminary engineering costs. The recommended inflation factor for the construction cost is 5% per year. The preliminary engineering and right-of-way costs should not be inflated for the projected year of construction.

- 9. <u>Maintenance of Traffic During Construction</u>. Discussion should include specific information pertaining to maintenance of traffic during construction. Discussion should include economic information used to determine whether to maintain traffic or use a detour. If the traffic maintenance plan changes as a result of the hearing, the Design Summary should be revised before requesting design approval.
- 10. <u>Mitigation Measures</u>. Most environmental considerations are outlined in the environmental document. Standard mitigation measures which recur on every project do not need to be reiterated within the Design Summary. Items such as seeding and erosion control are addressed adequately by the INDOT *Standard Specifications*.

Special project-specific mitigation measures should be mentioned in this section. If a fish and wildlife review is required, the designer should refer to the Fish and Wildlife Review Instructions and Form. Editable versions of such documents may be found on the Department's website, at <a href="www.in.gov/dot/div/contracts/design/dmforms/">www.in.gov/dot/div/contracts/design/dmforms/</a>. The discussion should include mitigation measures which were not mentioned in the environmental document or those which need further explanation. Wetland mitigation, woody revegetation, or time restrictions on tree clearing or channel work are good examples of mitigation to include.

If there are no project-specific mitigation measures, this section should include a statement similar to the following: *No special mitigation measures are required for this project*.

11. <u>Public Involvement</u>. For the Draft Design Summary, a statement should be made indicating that an opportunity for a public hearing will be offered by advertising in local newspapers. Add that any opinions or comments received by the published deadline date will be added to this report. Afterwards, the Final Design Summary will incorporate all views expressed by the public.

For the final report, indicate one of the scenarios as follows:

- a. an opportunity for a public hearing was advertised in local newspapers with no requests forthcoming by the published hearing deadline of <u>date</u>;
- b. an opportunity for a public hearing was advertised and a hearing was requested, but concerns were addressed on an individual basis; or
- c. a public hearing was held on <u>date</u>.

A summary and analysis of any views received concerning the proposed project is then developed. Comment sheets can be used to address all views or the comments can be added to the final section of the Design Summary. It is not considered responsive to state, "it is not part of the project scope," or "it will be investigated."

For a project that does not require a hearing because less than 0.2 ha of additional permanent right of way is required, a statement should be included similar to the following: This project is exempt from public hearing requirements because less than 0.2 ha of additional permanent right of way is required.

#### 12. Miscellaneous Items.

| a. | The preparer of the Design Summary should sign the document. Information to   |
|----|---|
|    | be included should be the consulting firm name, name of the preparer, and the |
|    | date:   |

| (Preparer's Name)      | (Date) |
|------------------------|--------|
| (Consulting Firm Name) |        |

- b. Attachments should include the following:
  - (1) a copy of the Field Check Minutes. Include documentation of any field check concerns that were resolved after the field check minutes were prepared;

- (2) a copy of the Fish and Wildlife Review Memorandum (if applicable). See Section 7-2.05. A Fish and Wildlife Review is required for any project impacting rivers, streams, or wetlands or one with special environmental mitigation measures;
- (3) a copy of the memorandum indicating that the hearing requirements have been met, the Certification of Public Hearing Requirements and Socio-Economic-Ecological-Environmental Evaluations (SEE Certificate). See Section 7-2.05:
- (4) a map showing the location of the project in the State, and
- (5) a quadrangle map or other local map showing the location of the project.

Other items that are pertinent to this report may also be attached. The designer should check with the Design Division project manager for clarification on what to attach to the report.

#### 7-2.03 Road Rehabilitation Project

For a road rehabilitation project, a brief Design Summary should accompany the design approval packet when it is submitted for design approval. The design approval packet typically includes the field check minutes, the pavement design letter, and a current cost estimate for the project. For a project which requires a public information meeting, the Design Summary information should be made available at the time the meeting is requested, even if the project has not yet reached the design approval stage.

The Design Summary format for a road rehabilitation project should be as follows:

- 1. <u>Title Block</u>. Follow the guidelines for a full Design Summary (Section 7-2.02).
- 2. <u>Location and Project Description</u>. Describe the location of the project by showing the beginning and ending points in kilometers from a given State route. Provide the project length and the county name. Briefly describe the type of pavement rehabilitation treatment that is being specified.

# DESIGN SUMMARY – BRIDGE / CULVERT REPLACEMENT Figure 7-2A

| Date:   |   |
|---|---|
| Route:  |   |
| Bridge File:  |   |
| Des. No.  |   |
| Project No.   | -   |
| Over:   |   |
| County:   |   |
| Federal Oversight: Yes No Click on  | appropriate box.  |
| <b>Location and Project Description</b>   |   |
| This project involves the replacement of the su   | abject bridge located about of  |
| vertical alignment with a bridge featuring measurement will be a continuous and a clear roa with of incidental cons | g structure on essentially the same horizontal and nodern safety and structural standards. The new bridge with spans of adway of The project length will be struction on the end and on |
| the end.  Additional Discussion:  |   |
|   |   |
|   |   |
|   |   |
| c ,   | s, less-than-desirable intersection sight distance, a, clearing of wooded or forested areas, significant ewalks, and design exceptions.   |
| Part I – Project Development  | Design Summary  |

Design Summary – Bridge / Culvert Replacement, Figure 7-2A contd.

#### **Need for Improvement**

Describe why the bridge is being replaced; i.e., existing structure condition, flooding considerations, substandard geometrics, accidents, etc. Discuss accident history in this section whether it is a problem or not.

#### **Prior Studies and Considerations**

| Categorical Exclusion Approval Date:          |                                     |
|---|-------------------------------------|
| Additional Information Approval Date:         |                                     |
|   |                                     |
|   |                                     |
| Environmental Permit Required                 | Date Received                       |
|   |                                     |
| If not received yet, enter Pending.           |                                     |
| The proposed design is consistent with the ap | proved environmental documentation. |
| Design Data                                   |                                     |
| Project Design Criteria:                      |                                     |
|   |                                     |
| Terrain:                                      |                                     |
|   |                                     |
| Part I – Project Development                  | Design Summary                      |

| Design Summary – Bridge / Culvert Replacement, Figure 7-2A contd.   |
|---|
| Posted Speed:   |
| Access Control:   |
| Bridge File:  |
| Number of Lanes and Width:  |
| Shoulders (Width and Material):   |
| Maximum Right-of-Way Width:   |
| Typical Right-of-Way Width:   |
| Structure Clear Roadway Width:  |
| Traffic Data  |
| AADT (20):VPD   |
| AADT (20): VPD  |
| DHV (20):VPH  |
| Comm. Veh.: %DHV  |
| %AADT   |
| Description of Right-of-Way   |
| The proposed project will require an additional of permanent right-of-way. A total additional of temporary right-of-way will be required from the properties as follows:  Parcel Property Owner(s) Station Offset |
| Relocations of businesses or residents will be required of the properties as follows:  Parcel Property Owner(s) Station Offset  |
| Turcer Troperty Owner(s) Station Offset   |

| Design Summary | – Bridge / | Culvert Ren | lacement.    | Figure 7 | -2A contd.   |
|----------------|------------|-------------|--------------|----------|--------------|
| Dough Sammary  | 211450     | Cartore     | , in Collies | 115010 / | = I I Conta. |

| <u>Estima</u>                 | ted Cost                            | <u>s</u>   |                          | Year:                   |                               | Year:                       |                             |                  |
|-------------------------------|-------------------------------------|--|--------------------------|-------------------------|-------------------------------|-----------------------------|-----------------------------|------------------|
| Prelimi                       | inary Eng                           | ineering:  |                          | \$                      |                               | \$                          |                             |                  |
|                               | of-Way:                             | U  |                          | ·                       |                               |                             |                             |                  |
| Bridge                        | File:                               |  |                          |                         |                               |                             |                             |                  |
|                               | uction:                             |  |                          |                         |                               |                             |                             |                  |
| Гotal С                       | Cost:                               |  |                          | \$                      |                               | \$                          |                             |                  |
| Mainte                        | enance of                           | Traffic Duri   | ng Constru               | ıction Click            | on one box                    | for each sta                | itement.                    |                  |
|                               |                                     | n official and _   |                          |                         |                               |                             | _                           |                  |
| oe used<br>service<br>detours | d by loca<br>s would l<br>s would b | I traffic adding the about the \$ the about the about, and | g<br>minute<br>, assumir | to a thrown the cong% u | ngh trip. Didetours. The loca | elay to em<br>le cost to th | ergency and<br>ne public to | d public use the |
| oridge                        |                                     | temporary bri<br>and runaround<br>naround.                 |                          |                         |                               |                             |                             |                  |
| <u>Mitiga</u>                 | tion Mea                            | <u>sures</u>   |                          |                         |                               |                             |                             |                  |
|                               |                                     | roject-specific<br>x for each state                        | •                        | measures are            | required.                     |                             |                             |                  |
| Yes                           | No V                                | Voody revegeta   | ation will b             | e placed in sp          | pecific areas                 | S.                          |                             |                  |
| Yes                           | No "                                | Do Not Mow o   | or Spray" si             | gns will be p           | osted along                   | the right-of                | f-way.                      |                  |
| Yes                           | No "                                | Do Not Spray   | " signs wi               | ll be posted            | along the ri                  | ght-of-way,                 | since legui                 | me seed          |
| nixture                       | e will be ı                         | ised.  |                          |                         |                               |                             |                             |                  |
| Other S                       | Specific M                          | litigation Mea   | sures:                   |                         |                               |                             |                             |                  |
|                               |                                     |  |                          |                         |                               |                             |                             |                  |
|                               |                                     |  |                          |                         |                               |                             |                             |                  |

Design Summary – Bridge / Culvert Replacement, Figure 7-2A contd.

Add any other appropriate items, e.g., date restrictions on tree clearing or channel excavation.

#### **Public Involvement**

No views or opinions other than those of the officials of the highway organizations and the affiliated workers have been expressed in this report. Click on one box for each statement.

Yes No An opportunity for a public hearing will be offered through advertising in local newspapers. Any opinions or comments received by the published deadline will be added to this report.

Yes No A public hearing will be scheduled. Any comments received at the public hearing will be added to this report including their resolutions.

Design Engineer

Attachments: Click on one box for each statement.

Yes No Field Check Report

Yes No Fish and Wildlife Meeting Report

Yes No Public Hearing Transcript

Yes No Public Hearing Comments and Resolutions

# DESIGN SUMMARY – ROAD PROJECT Figure 7-2B

| Date   |
|--|
| Route:   |
| Des. No.:  |
| Project No.:   |
| County:  |
| Federal Oversight: Yes No [Click on appropriate box.]  |
| Location and Project Description:  |
| This project involves the improvement of a segment of, about of of   |
| This road reconstruction project will  |
| [Additional discussion in this area should be limited to significant county road relocations, less than desirable intersection sight distance, underground storage tanks, channel relocation, clearing of wooded/forest areas, significant historical/archaeological considerations, sidewalks and design exceptions.] |
| Need for Improvement:  |
| The existing roadway consists of driving lanes each of which is about in width. The present highway right-of-way width along this portion of is about  |
| [Any design exceptions, underground storage tanks, channel relocation, clearing of wooded/forest areas, sidewalks and less than desirable intersection sight distance should be mentioned here.]   |
| Part I – Project Development Design Summary  |

| Design Summary – Road Project, Figure 7-2B                 | contd.                          |
|--|---------------------------------|
| Route Des. No  |                                 |
| <b>Prior Studies and Considerations</b>                    |                                 |
| Environmental Assessment Approval Date:                    |                                 |
| Environmental Assessment Addendum Appro                    |                                 |
| Preliminary Field Check Held:                              |                                 |
| Environmental Permit Required                              | Date Received                   |
|  |                                 |
|  |                                 |
|  |                                 |
|  |                                 |
|  |                                 |
|  |                                 |
| [If not received yet, enter Pending.]                      |                                 |
|  |                                 |
| The proposed design is consistent with the app             | proved environmental documents. |
|  |                                 |
|  |                                 |
| <u>Design Data</u>   |                                 |
|  |                                 |
| Project Design Criteria:                                   |                                 |
| Functional Classification:                                 |                                 |
| Terrain:   |                                 |
| Design Speed:  |                                 |
| Posted Speed: mph  |                                 |
| Access Control:  |                                 |
| Number of Lanes and Width: at                              |                                 |
| Shoulders (Width and Type):                                |                                 |
| Maximum Right-of-Way Width:<br>Minimum Right-of-Way Width: |                                 |
| wininium Right-of-way width.                               |                                 |

\$ \_\_\_\_\_

Preliminary Engineering:

Right-of-Way:

\$ \_\_\_\_\_

| Design Sumi                                   | mary – Road Project, F   | Figure 7-2B cont                   | d.                            |                                      |                              |
|---|--|------------------------------------|-------------------------------|--------------------------------------|------------------------------|
| Route   | Des. No  |                                    |                               |                                      |                              |
| Construction                                  | :  |                                    |                               |                                      |                              |
| Total Cost:                                   |  | \$                                 |                               | \$                                   |                              |
| D. A  | D. M   |                                    | _% annual inflat              | ion is used for p                    | orojection                   |
|   | Des. No  |                                    |                               |                                      |                              |
| <u>Maintenanc</u>                             | e of Traffic During C  | <u>Construction</u>                |                               |                                      |                              |
| main<br>place                                 | truction, traffic will be tained by utilizing the donto an officia and     | existing roadwa                    | State routes                  | would use                            |                              |
| routes could<br>and public se<br>use the deto | be used by local traffervices would be about urs would be \$ day detour, a | ic adding<br>t minut<br>, assuming | to a throuses using the detog | igh trip. Delay<br>ours. The cost to | to emergency o the public to |
| Mitigation N                                  | <u>Measures</u>  |                                    |                               |                                      |                              |
|   | ng project-specific miti<br>e box for each stateme                         | -                                  | are required.                 |                                      |                              |
| Yes No<br>Yes No<br>Yes No<br>mixture will    | Woody revegetation "Do Not Mow or Sp<br>"Do Not Spray" signed be used.     | oray" signs will l                 | pe posted along t             | •                                    |                              |
| Other Specif                                  | ic Mitigation Measure  | s:                                 |                               |                                      |                              |
| [Add any oth                                  | ner appropriate items, e   | e.g., date restrict                | ions on tree clear            | ring or channel                      | excavation.]                 |
|   |  |                                    |                               |                                      |                              |

### DESIGN SUMMARY – ROADWAY LIGHTING REPLACEMENT Figure 7-2C

| Date                            |           | _              |                   |         |  |
|---------------------------------|-----------|----------------|-------------------|---------|--|
| Route:                          |           |                |                   |         |  |
| Des. No.:                       |           |                |                   |         |  |
| Project No.:                    |           |                |                   |         |  |
| County:                         |           |                |                   |         |  |
| Federal Oversight: Yes          | No        | [Click on      | appropriate box.] |         |  |
| Location and Project De         | scription | <u>1</u>       |                   |         |  |
| This project involves the of to |           | nization of re | , , ,             | , about |  |

#### **Existing Conditions**

The existing roadway lighting system consists of conventional lights with pole heights of 15 m (50 ft) or less and highmast poles with pole heights of 24 m (80 ft) or more. This system was installed before July 1, 1990. The conductors were made from aluminum material. The highmast poles are equipped with top latch devices.

#### **Need for Improvement**

The conventional pole breakaway supports do not meet the AASHTO criteria for small vehicular crash tests. This policy became effective July 1, 1990. Aluminum conductors tend to corrode when they come in contact with moisture. This corrosion may cause lighting outages. Top latch devices on highmast poles sometimes do not sit properly and the ring cannot be lowered. A bottom latch system is installed to correct this problem. No right-of-way will be required for this project.

Public Hearings:

This project is in accordance with the INDOT Public Involvement Procedures for Project Development approved by FHWA.

Exclusion under 23 CFR 771.117(c)(8).

Permits and Agreements:

Environmental Permit Required

Date Received

Railroad Agreement

Utility Agreements Required

## Cost

The estimated cost of this project is \$ \_\_\_\_\_\_.

Design Engineer

[If not received yet, enter Pending.]

| Design S       | Summary – Roadway Lighting Replacement, Figure 7-2C contd |
|----------------|---|
| Route _        | Des. No   |
|                | Sign and Lighting Design Unit Supervisor                  |
| ———<br>Attachm | :<br>nent: [Click on one.]                                |
|                | No Field Check Report                                     |

#### **Public Involvement**

No views or opinions other than those of the officials of the highway organizations and the affiliated workers have been expressed in this report. [Click on one box for each statement.]

Yes No An opportunity for a public hearing will be offered through advertising in local newspapers. Any opinions or comments received by the published deadline will be added to this report.

Yes No A public hearing will be scheduled. Any comments received at the public hearing will be added to this report including their resolutions.

Design Engineer

Attachments: [Click on one box for each statement.]

Yes No Field Check Report

Yes No Fish and Wildlife Meeting Report

Yes No Public Hearing Transcript

Yes No Public Hearing Comments and Resolutions

| Design S  | Summary – R                 | loadway Ligh                 | nting Replacem | ent, Figure  | 7-2C contd.                |  |
|---|-----------------------------|------------------------------|----------------|--------------|----------------------------|--|
| Route _   | Do                          | es. No                       |                | _            |                            |  |
| Traffic 1   | <u>Data</u>                 |                              |                |              |                            |  |
|   | 20):                        |                              |                |              |                            |  |
|   | 20):                        |                              |                |              |                            |  |
|   | 0):                         |                              |                |              |                            |  |
| Comm.   | Veh.:                       |                              |                |              |                            |  |
|   |                             | %AA                          | DT             |              |                            |  |
| Descrip   | tion of Right               | t-of-Way                     |                |              |                            |  |
| additionation additionation and additionation and additionation and additionation and additionation | al<br>properties as         | of temporal strains follows: |                | y will be re | of permanent right-of-way. |  |
|   | ons of busine<br>Property O |                              |                |              | e properties as follows:   |  |
|   |                             |                              |                |              |                            |  |

| Route  | Des. No   |  |   |              |
|--|---|--|---|--------------|
| Estimated Co   | <u>sts</u>  |  |   |              |
|  |   | Year:  | Year*:  |              |
| Preliminary Er   | 0   | \$   | \$  |              |
| Right-of-Way:<br>Construction:   |   |  |   |              |
| T + 1 C +  |   | Ф  | Ф   |              |
| Total Cost:  |   | \$   | \$  |              |
| <b>D</b>   | <b>5</b>  |  | inflation is used for projection  |              |
| Route  | Des. No   |  |   |              |
|  |   |  |   |              |
|  | of Traffic During Co  |  |   |              |
| During construmaintain placed routes could be and public servuse the detour  | oction, traffic will be ined by utilizing the e onto an official and e used by local traffic vices would be about as would be \$  | [click on one]  xisting roadway of  detour over State ro, adding  adding to a finite to a f      | to a through trip. Locathrough trip. Delay to emergence detours. The cost to the public tase the local detour, or         | ıl<br>y<br>o |
| During construmaintain placed routes could be and public servuse the detour AADT, during   | oction, traffic will be ined by utilizing the e onto an official and e used by local traffic vices would be about s would be \$ day detour, and the state of | [click on one]  xisting roadway of  detour over State ro, adding  adding to a finite using the, assuming% u  | to a through trip. Locathrough trip. Delay to emergence detours. The cost to the public tase the local detour, or         | ıl<br>y<br>o |
| During construmaintain placed routes could be and public services the detour AADT, during Mitigation Me  | nction, traffic will be ined by utilizing the e onto an official and e used by local traffic vices would be about s would be \$ day detour, and the details are detailed as a day detour, and the details are detailed.   | [click on one]  xisting roadway of  detour over State roading  adding to a factor of the control of the cont | to a through trip. Locathrough trip. Delay to emergence detours. The cost to the public tase the local detour, orst.      | ıl<br>y<br>o |
| During construmaintain placed routes could be and public services the detour AADT, during Mitigation Me The following [Click on one between the content of t | nction, traffic will be ined by utilizing the e onto an official and e used by local traffic vices would be about s would be \$ day detour, and easures  project-specific mitig box for each statement.   | [click on one]  xisting roadway of  detour over State roading  adding to a factor of the control of the cont | to a through trip. Local through trip. Delay to emergence detours. The cost to the public through the local detour, orst. | ıl<br>y<br>o |
| During construmaintain placed routes could be and public servuse the detour AADT, during Mitigation Me   | easures  project-specific mitig box for each statemen  Woody revegetation  "Do Not Mow or Spr   | [click on one] xisting roadway of detour over State roading to a ding to a minutes using the, assuming% und \$/ user costs.]  will be placed in specific analy signs will be posted along.   | to a through trip. Local through trip. Delay to emergence detours. The cost to the public through the local detour, orst. | al<br>y<br>o |

| July 2006      | ENVIRONMENTAL PROCEDURES / DESIGN SUMMARY                                | 7-2(25)      |
|----------------|--|--------------|
| Design Summa   | ry – Roadway Lighting Replacement, Figure 7-2C contd.                    |              |
| Route          | Des. No  |              |
| Other Specific | Mitigation Measures:   |              |
| [Add any other | appropriate items, e.g., date restrictions on tree clearing or channel e | excavation.] |
|                |  |              |

# DESIGN SUMMARY – ROADWAY SIGNS REPLACEMENT Figure 7-2D

| Date   |
|--|
| Route:   |
| Des. No.:  |
| Project No.:   |
| County:  |
| Federal Oversight: Yes No [Click on appropriate box.]  |
| Location and Project Description   |
| This project involves the modernization of signage and sign structures on, about of to about of  |
| Existing Conditions  |
| The existing regulatory and warning sheet signs and panel guide signs are at least and years old, respectively. U-channel posts for sheet signs lack horizontal and/or vertical clearance, and some have been installed back-to-back. Overhead sign structures have a vertical clearance of less than 5.2 m (17 ft). Anchor bolts on the structures have been badly deteriorated. The sign supports are within slope grading areas.  |
| Need for Improvement   |
| The signs have lost some of their retroreflectivity and do not meet minimum retroreflectivity requirements. U-channel posts on back-to-back installation will not meet the AASHTO criteria for small vehicular crash tests. Sheet signs must maintain minimum horizontal and vertical clearance based on the type of roadway for which they are installed. Overhead sign structures must have a minimum 5.2-m (17-ft) vertical clearance. No right-of-way will be required for this project. |

| Design Summary – Roady      | vay Signs Replaceme | ent, Figure 7-2D contd.   |
|-----------------------------|---------------------|---|
| Route Des. No               | ٠                   |   |
| Prior Studies and Consid    | <u>derations</u>    |   |
| Environmental Document      |                     | oject meets the requirements for a Categorian under 23 CFR 771.117(c)(8).                 |
| Public Hearings:            | <b>.</b>            | oject is in accordance with the INDOT Pubnent Procedures for Project Development approvA. |
| Permits and Agreements:     |                     |   |
| Environmental Permit Rec    |                     | Date Received   |
| Railroad Agreement          |                     |   |
| Utility Agreements Requir   | red                 |   |
|                             |                     |   |
| [If not received yet, enter |                     |   |
| <u>Cost</u>                 |                     |   |
| The estimated cost of this  | project is) \$      |   |
|                             |                     |   |
| Design Engineer             |                     |   |

| Design Summary – Roadwa   | ay Signs Replacement, Figure 7-2D contd. |
|---------------------------|--|
|                           |  |
| Sign and Lighting D       | Design Unit Supervisor                   |
| ::                        |  |
| Attachment: [Click on one | .]                                       |
| Yes No Field Check        | Report                                   |

### **Public Involvement**

No views or opinions other than those of the officials of the highway organizations and the affiliated workers have been expressed in this report. [Click on one box for each statement.]

Yes No An opportunity for a public hearing will be offered through advertising in local newspapers. Any opinions or comments received by the published deadline will be added to this report.

Yes No A public hearing will be scheduled. Any comments received at the public hearing will be added to this report including their resolutions.

| Design Engineer |         |   |  |
|-----------------|---------|---|--|
|                 |         |   |  |
|                 |         |   |  |
|                 | _:      | <u> </u>                                |  |
| Attacl          | nments: | [Click on one box for each statement.]  |  |
| Yes             | No      | Field Check Report                      |  |
| Yes             | No      | Fish and Wildlife Meeting Report        |  |
| Yes             | No      | Public Hearing Transcript               |  |
| Yes             | No      | Public Hearing Comments and Resolutions |  |

# DESIGN SUMMARY – SIGNALIZATION PROJECT Figure 7-2E

| Date  |                                      |  |  |  |  |   |
|---|--------------------------------------|--|--|--|--|---|
| Route:  |                                      |  |  |  |  |   |
| Des. Nos.:  |                                      | ,  |  |  |  |   |
|   |                                      | ,  |  |  |  |   |
|   |                                      |  |  |  |  |   |
| Federal Oversi  | ight: Ye                             | es No  | [Click on appre  | opriate box.]  |  |   |
|   |                                      |  |  |  | _ of   |   |
|   |                                      |  | at   |  |  |   |
|   |                                      |  |  |  |  |   |
|   |                                      |  |  |  |  |   |
|   |                                      |  |  |  | _ of   |   |
|   |                                      |  |  |  |  |   |
| Yes Yes Yes Yes Yes Yes Yes Yes                                     | No<br>No<br>No<br>No<br>No<br>No     | Installation of  | new signal headed-loop system nal structures ag signals        | ds and wiring  |  | ropriate boxes.] net(s)   |
| travel patterns<br>timing calcula<br>supplying the<br>them. Pedestr | s; as a rations we location rian sig | result, the overall be performed in sinformation and sidew | all level of served by the State shown above, halk ramps are i | vice of the interest of Indiana. The as verified that not under the relationship of th | ersection shou<br>he<br>t signalization<br>e feasible or n | e progression and ald improve. Al District, in is warranted for necessary. There is right-of-way is |

Design Summary – Signalization Project, Figure 7-2E contd.

| Environmental Documentation:                          | This project meets the requirements for a Categorical Exclusion under 23 CFR 771.117(c)(8).                              |
|---|--|
| Public Hearings:                                      | This project is in accordance with the INDOT Public Involvement Procedures for Project Development approved by FHWA.     |
| Permits and Agreements: Environmental Permit Required | Date Received  |
| Railroad Agreement                                    |  |
| Utility Agreements Required                           | Date Received  |
|   |  |
| [If not received yet, enter Pending.]                 |  |
| Maintenance of Traffic                                |  |
|   | e maintained at all times. The use of signs, cones, barrels, d flaggers will be used as necessary in compliance with the |
| Cost  |  |
| The estimated total cost of this work                 | s is \$  |
| Design Engineer                                       |  |

Design Summary – Signalization Project, Figure 7-2E contd.

Signal Design Unit Supervisor

\_\_\_\_:\_\_\_

Attachment: [Click on one.]

Yes No Field Check Report

Do not discuss bridge rehabilitation work, as this is addressed in the Bridge Inspection Report. It is also unnecessary to address signage or lighting requirements.

3. <u>Maintenance of Traffic During Construction</u>. Indicate whether the mainline traffic will be maintained by crossovers or lane closures. Discuss any ramp closures that will occur. Address situations where staging of ramp closures may be required so that adjacent interchanges are not closed simultaneously. Include the approximate duration of each ramp closure and identify the proposed marked detour route. Describe any improvements that will be made to local roads or city streets that will be used as a marked or unmarked detour. Will a formal agreement with local governments be required?

If the project is located near a large urban or other heavily congested area, discuss any capacity constraints due to lane closures. Include the anticipated delays to the motoring public during peak traffic periods. Provide the approximate length of the queue and discuss user costs. Indicate whether a transportation management plan (TMP) was utilized in developing the traffic control plan (TCP) for the project. Discuss whether A-Plus-B bidding would be beneficial.

The items of discussion specified in this section are most often not required for a rural Interstate rehabilitation project, unless ramp closures or long delays are anticipated.

- 4. <u>Resolution of Field Check Items or Scope Changes</u>. Discuss any items which may have been left unresolved in the field check minutes or attach memorandums which may indicate how field check issues were resolved. Provide a brief, written documentation of any changes from the original project scope.
- 5. <u>Design Exceptions</u>. If applicable, list any Level One design elements for which a design exception was obtained and give the date of the design exception.
- 6. <u>Attachments.</u> The attachments to the Design Approval packet should include the following:
  - a. field check minutes:
  - b. pavement design letter; and
  - c. cost estimate.

The Scope/Environmental/Permit Compliance Certification Form shall be submitted along with the Final Design Summary at the design approval stage.

#### 7-2.04 Transmittal for Design Hearing

See Figure 7-2F, Document Transmittal to Hearings Section and Request for Public Hearing – Cover Memorandum Form.

#### 7-2.05 Attachments

The attachments that should be included with the Design Summary are as follows:

- 1. Figure 7-3A, Fish and Wildlife Review Memorandum, as described in Section 7-3.0.
- 2. If a public hearing is held, Figure 7-2G, Certificate of Public Hearing Held, should be attached. If a public hearing is afforded but not held, Figure 7-2H, Certificate of Public Hearing Afforded but Not Held, should be attached.
- 3. Figure 7-1A, Scope / Environmental Compliance Certification / Permit Application Certification.

Editable versions of all of the attachments listed above may be found on the Department's website, at <a href="https://www.in.gov/dot/div/contracts/design/dmforms/">www.in.gov/dot/div/contracts/design/dmforms/</a>.

#### 7-2.06 Design Approval Process

In order to obtain Design Approval for a project, it is necessary to have met the environmental requirements. The environmental requirements are considered met under any one of the conditions as follows:

- 1. Environmental Impact Statement is complete and the Record of Decision (ROD) has been issued;
- 2. Environmental Assessment is complete and a Finding Of No Significant Impact (FONSI) is made by Federal Highway Administration; or
- 3. Categorical Exclusion is complete. If there is a line for Federal Highway Administration to sign, it must be so signed.

| 7-2(3      | 4)             | ENVIRONMENTAL PROCEDURES / DESIGN SUMM  | ARY July 2006           |
|------------|----------------|---|-------------------------|
| Date       |                |   |                         |
| MEM        | IORANI         | DUM   |                         |
| TO:        |                | <del></del>   |                         |
|            |                | Public Hearings Manager Local Programs Division   |                         |
| FROI       | M:             | Project Manager Production Management Division  |                         |
| Route      | <del>2</del> : |   |                         |
| Des.       | No.            |   |                         |
| Bridg      | ge File:       |   |                         |
| PE Pı      | roject:        |   |                         |
| R/W        | Project:       |   |                         |
| CN P       | roject:        |   |                         |
| Locat      | tion:          | of  |                         |
| Coun       | ty:            |   |                         |
| Desci      | ription:       |   |                         |
| Cons       | ultant:        |   |                         |
|            |                | nerewith are three sets of Design Hearing Plans, one set of cr<br>Design Summary Report for your use. | oss sections, and three |
| Yes<br>Yes | No<br>No       | Please advertise for an opportunity for a hearing. Please set up for a hearing.                       |                         |
| cc:        | Sectio         | on Manager / Project Manager  |                         |

## DOCUMENT TRANSMITTAL TO HEARINGS MANAGER

Figure 7-2F

## [STATE OF INDIANA LETTERHEAD]

## CERTIFICATION OF PUBLIC HEARING REQUIREMENTS AND

## SOCIO-ECONOMIC, ECOLOGICAL, AND ENVIRONMENTAL EVALUATIONS

| Route: Des. No.:   | Project No.:   |
|--|--|
| Project Location:  | of   |
| Project  |  |
| Description:   |  |
| subject project was held atcompliance with Title 23, Code of Coordination, Public Involvement   Public Hearing Processing Proc | ortation hereby certifies that a public hearing relative to the on, in of Federal Regulations, Section 771.111(h) entitled "Early at and Project Development," and the Indiana Public edures for Federal-Aid Project Development approved by the J.S. Department of Transportation, on July 8, 1997. |
| of the location, its impact on the er  | ortation further certifies that the economic and social effects avironment, and the consistency with the goals and objectives nulgated by the community have been considered.  |
| Signed   | Signed   |
| Public Hearings Manager  | Environmental Policy Team Leader   |

### CERTIFICATION OF PUBLIC HEARING HELD

Figure 7-2G

## [STATE OF INDIANA LETTERHEAD]

| Dat   | <u>te</u>   |  |  |  |
|---|---|--|--|--|
| CERTIFICATION OF PUBLIC HEARING REQUIREMENTS AND SOCIO-ECONOMIC, ECOLOGICAL, AND ENVIRONMENTAL EVALUATIONS  |   |  |  |  |
| Route: Des. No.:  | Project No.:  |  |  |  |
| Project Location: of  | f   |  |  |  |
| Project Description:  |   |  |  |  |
| hearing relative to the subject project<br>Federal Regulations, Section 771.111<br>Project Development," and the India<br>Federal-Aid Project Development a | ortation hereby certifies that an opportunity for a public et has been afforded in compliance with Title 23, Code of 1(h) entitled "Early Coordination, Public Involvement and ana Public Involvement / Public Hearing Procedures for approved by the Federal Highway Administration, U.S. July 8, 1997. No hearing requests were received by a |  |  |  |
| of the location, its impact on the envi   | tation further certifies that the economic and social effects ironment, and the consistency with the goals and objectives lgated by the community have been considered.   |  |  |  |
| Signed  |   |  |  |  |
| Public Hearings Manager   | Environmental Policy Team Leader  |  |  |  |

## CERTIFICATION OF PUBLIC HEARING AFFORDED, BUT NOT HELD

Figure 7-2H

Once the Design Summary procedure is completed, the design approval packet should be transmitted to the Design Division Chief for approval. See Figure 7-2 I, Design Approval Packet Transmittal – Cover Memorandum form. Editable versions of this document may be found on the Department's website, at <a href="https://www.in.gov/dot/div/contracts/design/dmforms/">www.in.gov/dot/div/contracts/design/dmforms/</a>.

|       | Date  |
|-------|---|
| MEMO  | ORANDUM   |
| То:   | Director, Production Management Division  |
| Thru: | Manager, Roadway Services or Structural Services  |
| Thru: | Reviewer  |
| From: | Designer  |
| Re:   | Design Approval   |
|       | Route:  |
|       | nitted herewith is the design approval packet for the above referenced project. Al nmental and public hearing requirements have been met. |
|       | Design Approval Packet Approved:  Director, Production Management Division Date:  |
|       | :   |
| cc:   |   |
|       |   |

## DESIGN APPROVAL PACKET TRANSMITTAL

Figure 7-2 I

#### 7-3.0 FISH AND WILDLIFE REVIEW

The procedure for conducting a fish and wildlife review is as follows. Figure 7-3A, Fish and Wildlife Review Memorandum Form, should be used. An editable version of this document may be found on the Department's website, at <a href="https://www.in.gov/dot/div/contracts/design/dmforms/">www.in.gov/dot/div/contracts/design/dmforms/</a>.

- 1. A fish and wildlife review is required for each project that impacts streams shown as either solid blue lines or intermittent blue lines on the USGS quadrangle maps, and that includes a structure with a crossing span of 6.1 m or greater. Each project that impacts wetlands should also receive a fish and wildlife review.
- 2. The designer should fill out the entire Fish and Wildlife Review Memorandum form before it is submitted for review.
- 3. The Environment, Planning and Engineering Division's Environmental Assessment Section manager will sign the form once he or she finds the content satisfactory.
- 4. The United States Fish and Wildlife Service's copy of the form should be sent to its Warsaw, IN, office if the project is in one of the counties as follows:

| Allen     | Lagrange | Porter     |
|-----------|----------|------------|
| DeKalb    | Lake     | Pulaski    |
| Elkhart   | LaPorte  | St. Joseph |
| Fulton    | Marshall | Starke     |
| Jasper    | Newton   | Steuben    |
| Kosciusko | Noble    | Whitley    |

The form for a project in a county not listed above should be sent to the USFWS Bloomington, IN, office.

|   | Date   |
|---|--|
| MEMORANI  | DUM  |
| TO:   | Section Manager, Design Division                                       |
| THRU:   | Project Manager  |
| FROM:   | Design Engineer  |
| SUBJECT:  | Fish and Wildlife Review   |
| Existing R/W Maximum R/ Project length Incidental cor Bridge length Change in hor | iewed are listed below.  width: W width:  i: i: i: i: i:thicked below. |
| Channel reloc   | eation:  |

## FISH AND WILDLIFE REVIEW MEMORANDUIM

Figure 7-3A

| Fish and Wildlife Review Memorandum, Figure 7-3A contd.   |
|---|
| Other:  |
|   |
| Temporary R/W width beyond permanent R/W limits at the stream crossing:   |
| Distance of vegetation clearing from bridge coping to construction limits  NE Quadrant:  SE Quadrant:  SW Quadrant:  SE Quadrant: |
| Riprap extended below low water elevation? Yes No Click on one  |
| Erosion control methods:  |
| Fishpool/sediment trap:   |
| Description of wetlands involved:   |
| Detour? Yes No Click on one Temporary runaround? Yes No Click on one  |
| Work causeway:  |
| Seed mixtures:  |
| Woody revegetation:   |

| Fish and Wildlife Review Memorandum, Figure 7-3A contd.  Mitigation measures: |                  |  |
|---|------------------|--|
|   |                  |  |
|   |                  |  |
|   |                  |  |
|   |                  |  |
|   |                  |  |
|   |                  |  |
| cc:   | IDNR,            |  |
|   | USFWS,           |  |
|   | IDEM,            |  |
|   | Consultant,      |  |
|   | Section Manager, |  |